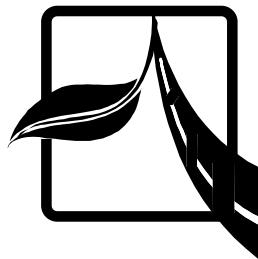




AAMA/AIAM Sulfur Test Program

W. M. Kreucher

April 23, 1997

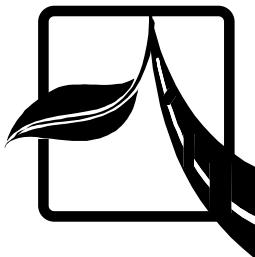


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Test Program Objective

- EPA requested additional data on the effects of fuel sulfur on LEV and ULEV vehicle technology
 - for setting Tier II vehicle/fuel standards,
 - updating MOBILE6,
 - toxic rulemaking
- Target completion of tests by May 30, 1997

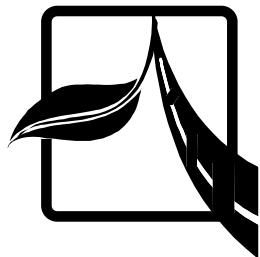


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Test Program Participants

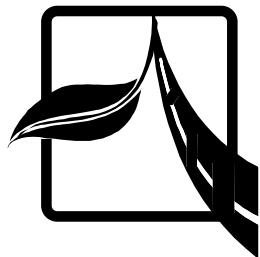
- 10 manufacturers
 - Chrysler, Ford, GM, Honda, Mazda, Mitsubishi, Nissan, Subaru, Toyota, and VW
- 21 vehicles
 - Mixture of LDVs and LDTs





Vehicle Hardware

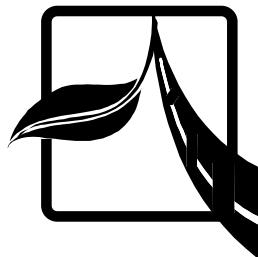
- LEV/ULEV production intent
- Aged to 50,000 or 100,000 mile equivalent,
per manufacturer normal protocol





Test Fuels

- Base fuel: California Cleaner Burning Gasoline (CaRFG)
- Five fuel sulfur levels
 - 40 (base), 100, 150, 330, and 660 ppm
- Fuel doped to required sulfur level with three-compound Auto/Oil mixture



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Vehicle Testing Procedure

- Auto/Oil test procedures
- Duplicate emissions tests
 - triplicates as per Auto/Oil criteria
- Sulfur removal protocol between different fuel sulfur levels
- FTP test cycle
 - feedgas and tailpipe measurements of regulated emissions (speciation optional)

